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## Ising model on the Cayley tree of third order with inhomogeneous interactions (Conference Paper)

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## Abstract

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In this paper we investigate the problem of phase transition for Ising model on a semi-infinite Cayley tree of third order with inhomogeneous left, middle and right parameters describing the strength of the interactions between left, middle and right nearest-neighbors respectively. We produce a recurrent equation that describes a limit behavior of the sequence conditional Gibbs measures and prove that if at least two of the parameters are positive one can reach phase transition. © 2018 Author(s).

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